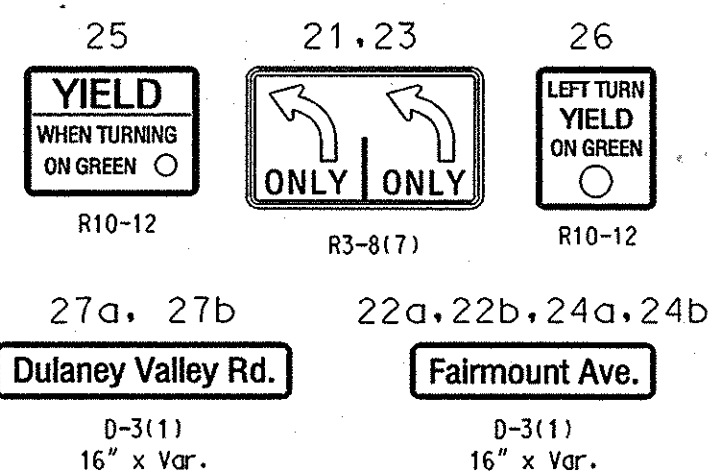
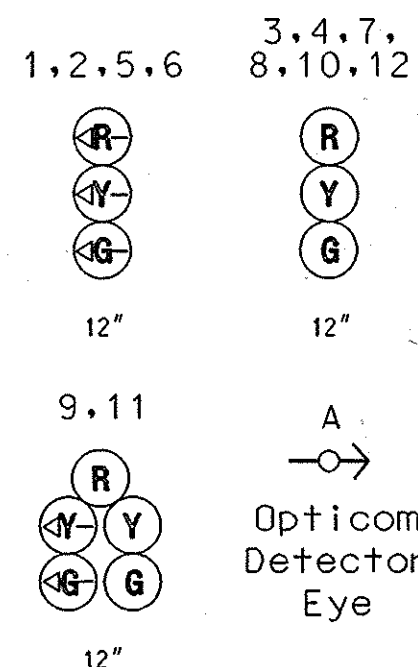


MD 146 is considered to run in a North/South direction.

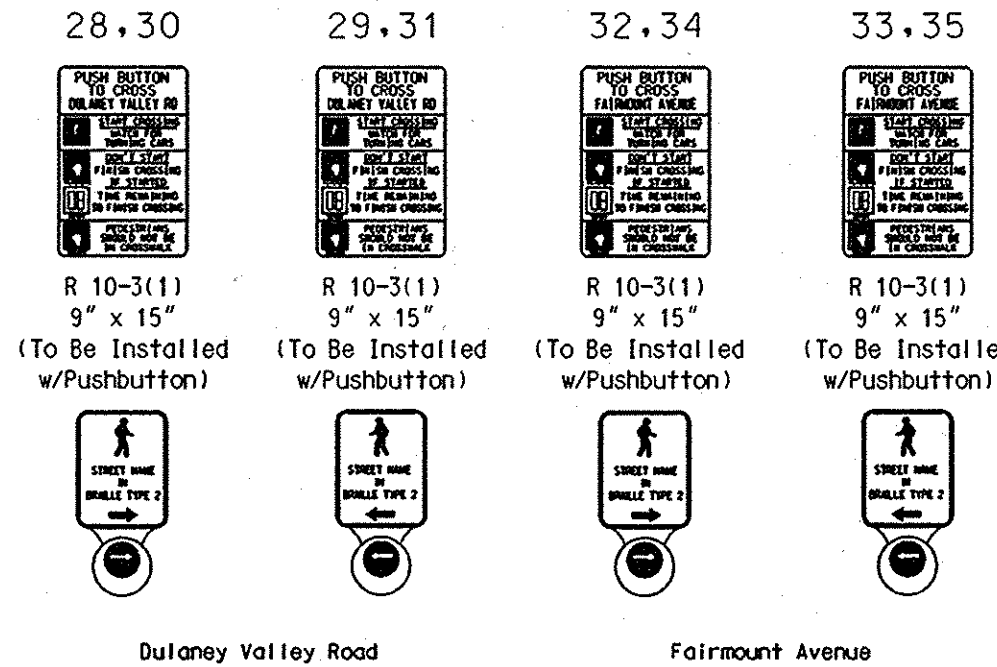
#### EXISTING SIGNALS



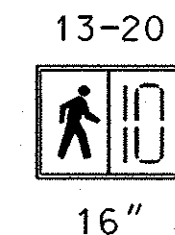
#### EXISTING SIGNALS



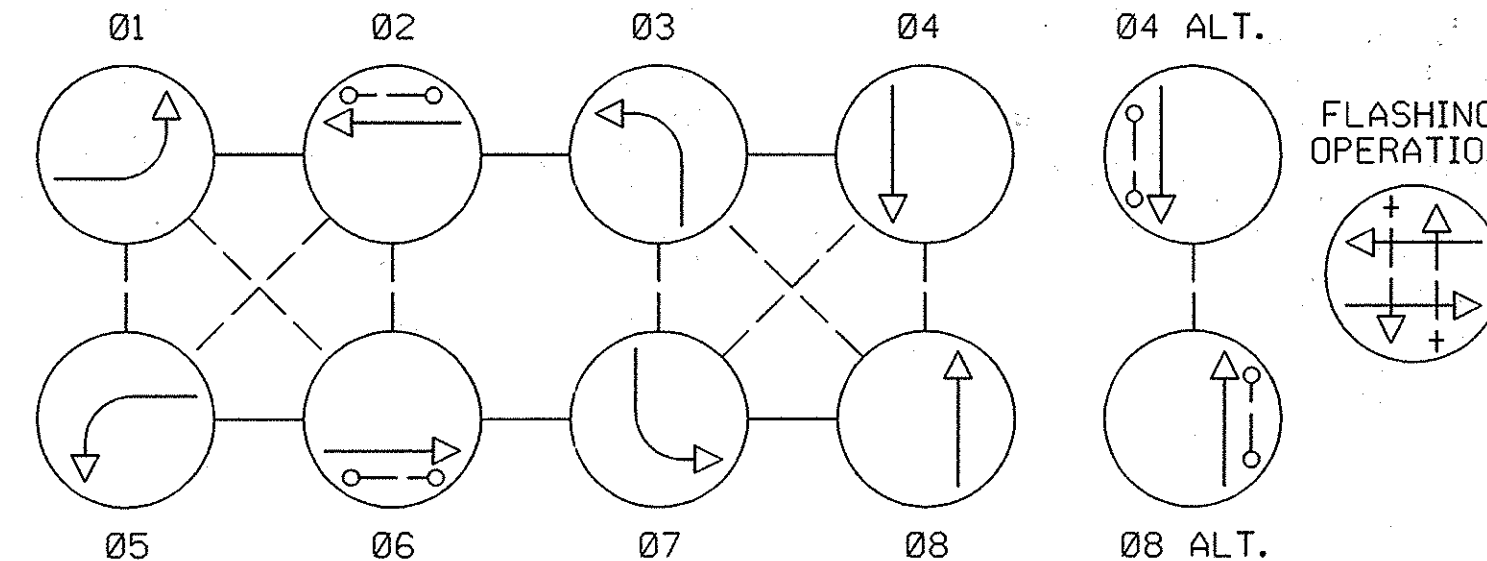
#### PROPOSED SIGNALS



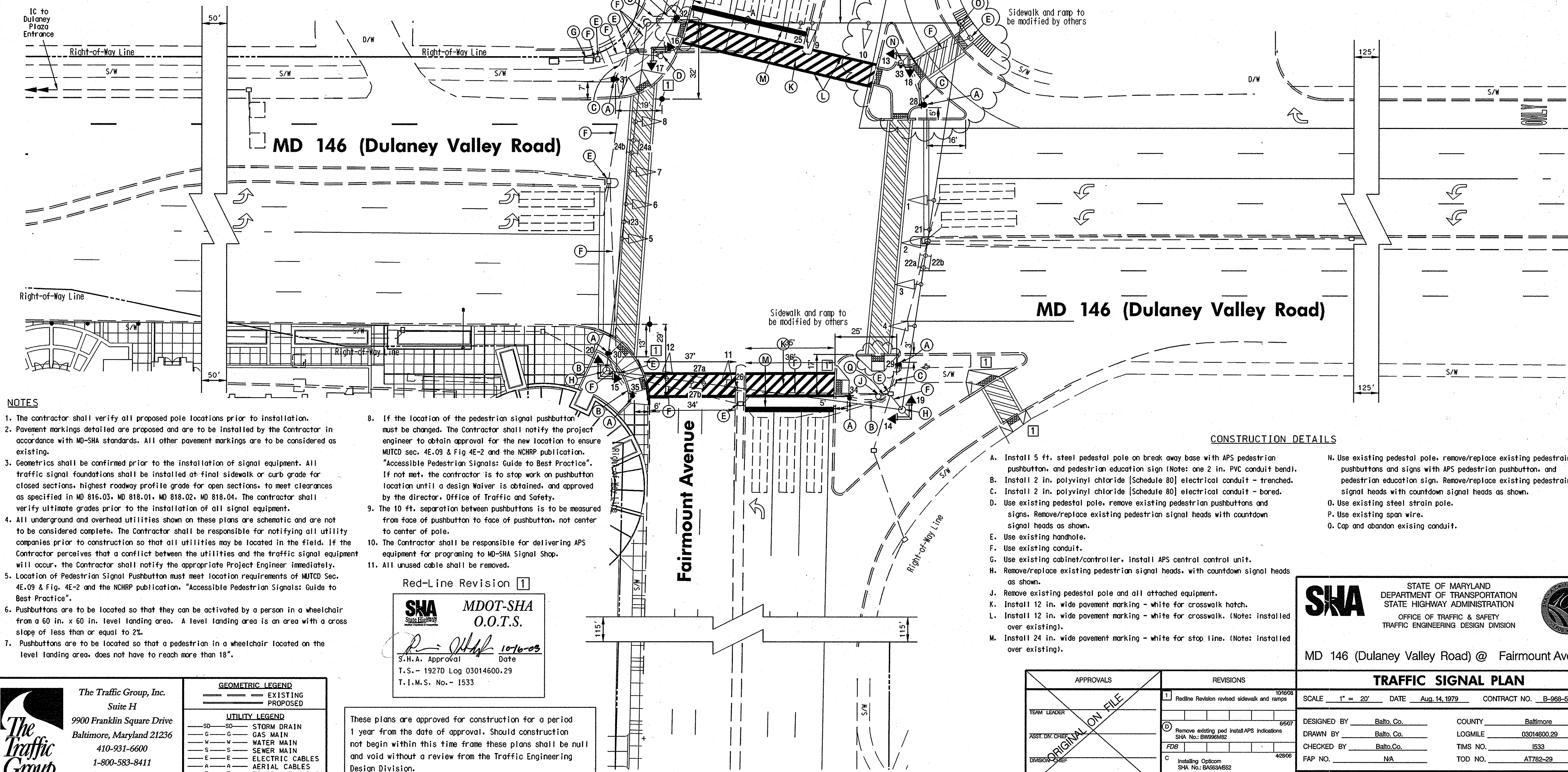
#### REMOVE AND REPLACE EXISTING SIGNALS



#### EXISTING NEMA PHASING



NOTE: PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.



#### NOTES

1. The contractor shall verify all proposed pole locations prior to installation.
2. Pavement markings detailed are proposed and are to be installed by the Contractor in accordance with MD-SHA standards. All other pavement markings are to be considered as existing.
3. Geometrics shall be confirmed prior to the installation of signal equipment. All traffic signal foundations shall be installed at final sidewalk or curb grade for closed sections, highest roadway profile grade for open sections, to meet clearances as specified in MD 816.03, MD 818.01, MD 818.02, MD 818.04. The contractor shall verify ultimate grades prior to the installation of all signal equipment.
4. All underground and overhead utilities shown on these plans are schematic and are not to be considered complete. The Contractor shall be responsible for notifying all utility companies prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal equipment will occur, the Contractor shall notify the appropriate Project Engineer immediately.
5. Location of Pedestrian Signal Pushbutton must meet location requirements of MUTCD Sec. 4E.09 & Fig. 4E-2 and the NCHRP publication, "Accessible Pedestrian Signals: Guide to Best Practice".
6. Pushbuttons are to be located so that they can be activated by a person in a wheelchair from a 60 in. x 60 in. level landing area. A level landing area is an area with a cross slope of less than or equal to 2%.
7. Pushbuttons are to be located so that a pedestrian in a wheelchair located on the level landing area, does not have to reach more than 18".

8. If the location of the pedestrian signal pushbutton must be changed. The Contractor shall notify the project engineer to obtain approval for the new location to ensure MUTCD Sec. 4E.09 & Fig 4E-2 and the NCHRP publication, "Accessible Pedestrian Signals: Guide to Best Practice". If not met, the contractor is to stop work on pushbutton location until a design waiver is obtained, and approved by the director, Office of Traffic and Safety.
9. The 10 ft. separation between pushbuttons is to be measured from face of pushbutton to face of pushbutton, not center to center of pole.
10. The Contractor shall be responsible for delivering APS equipment for programming to MD-SHA Signal Shop.
11. All unused cable shall be removed.

Red-Line Revision 1

**SNA** MDOT-SHA  
O.O.T.S.  
S.H.A. Approval Date 10-16-03  
T.S. - 1927D Log 03014600.29  
T.I.M.S. No. - 1533

These plans are approved for construction for a period 1 year from the date of approval. Should construction not begin within this time frame these plans shall be null and void without a review from the Traffic Engineering Design Division.

#### CONSTRUCTION DETAILS

- A. Install 5 ft. steel pedestal pole on break away base with APS pedestrian pushbutton, and pedestrian education sign (Note: one 2 in. PVC conduit bend).
- B. Install 2 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
- C. Install 2 in. polyvinyl chloride [Schedule 80] electrical conduit - bored.
- D. Use existing pedestal pole, remove existing pedestrian pushbuttons and signs. Remove/replace existing pedestrian signal heads with countdown signal heads as shown.
- E. Use existing handhole.
- F. Use existing conduit.
- G. Use existing cabinet/controller. Install APS central control unit.
- H. Remove/replace existing pedestrian signal heads, with countdown signal heads as shown.
- I. Remove existing pedestal pole and all attached equipment.
- J. Install 12 in. wide pavement marking - white for crosswalk hatch.
- K. Install 12 in. wide pavement marking - white for crosswalk. (Note: installed over existing).
- L. Install 24 in. wide pavement marking - white for stop line. (Note: installed over existing).
- M. Use existing pedestal pole, remove/replace existing pedestrian pushbuttons and signs with APS pedestrian pushbutton, and pedestrian education sign. Remove/replace existing pedestrian signal heads with countdown signal heads as shown.
- N. Use existing steel strain pole.
- O. Use existing span wire.
- P. Use existing conduit.

**SHA** STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION

MD 146 (Dulaney Valley Road) @ Fairmount Avenue

#### TRAFFIC SIGNAL PLAN

SCALE 1" = 20' DATE Aug. 14, 1979 CONTRACT NO. B-988-501-470

DESIGNED BY Balto. Co. COUNTY Baltimore  
DRAWN BY Balto. Co. LOGMILE 03014600.29  
CHECKED BY Balto. Co. TIMS NO. 1533  
FAP NO. N/A TOD NO. AT782-29

TS NO. 1927D DRAWING - OF SHEET NO. 1 OF 4

PLOTTED: Monday, October 20, 2008 AT 10:07 AM  
FILE: F:\2007\2007-0220\2007-Traffic Signal\Redline\MD146-Fairmount.dgn